

REMARKS

Rejection under 35 U.S.C. § 102

Claims 1, 2, 6, 8, 9 and 11 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,251,643 (hereinafter referred to as “Osypka”).

Claims 1, 2, 6, 8, 9 and 11 are cancelled without prejudice. Accordingly, the rejection of these claims is not addressed herein.

Rejections under 35 U.S.C. § 103(a)

Claims 3 and 4 are rejected under 35 U.S.C. § 103(a) as being unpatentable over “Osypka” in view of U.S. Patent No. 5,514,172 (hereinafter referred to as “Mueller”).

Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over “Osypka” in view of “Mueller” and further in view of U.S. Patent No. 4,944,088 (hereinafter referred to as “Doan ‘088”).

Claims 7, 10, 12, 13, and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over “Osypka” in view of U.S. Patent No. 6,181,971 (hereinafter referred to as “Doan ‘971”).

Claims 3, 4, 5, 7, 10-13 are cancelled without prejudice. Accordingly, the rejection of these claims is not addressed herein.

Applicant has amended claim 15. The amendment is supported by the original application. No new matter has been entered.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the applied reference (or references when combined) must teach or suggest all the claim limitations. *See* MPEP § 2143. Applicant respectfully submits that the applied references do not satisfy these criteria.

Applicant has amended claim 15. The amendment is supported by the original application. No new matter has been entered.

Claim 15 is directed to a method of manufacturing a biological electrical stimulus cable assembly. As amended, claim 15 recites:

- a) providing a cable portion, including a plurality of first conductive wires set into a length of insulative material having a surface, wherein the plurality of conductive wires are disposed at substantially the same radial depth within the insulative material, wherein the wires are encapsulated within the insulative material that forms a body of the cable portion;
- b) removing a portion of said insulative material from said surface of said length of insulative material to only a first one of said first conductive wires at a first location, thereby creating a first exposed first wire surface and removing a portion of said insulative material from said surface of said length of insulative material, also only to said first one of said first conductive wires at a second location, thereby creating a second exposed first wire surface, wherein the removing is performed on the cable portion after the first conductive wires have been set within the insulative material of the body of the cable portion;
- c) electrically connecting a second conductive wire to said first exposed first wire surface; and
- d) wrapping said second conductive wire about said cable portion and connecting it to said second exposed first wire surface, thereby creating a circumscribing electrode, wherein the second conductive wire is welded to the first one of said first conductive wires at the second exposed first wire surface.

The Office Action, dated 08/07/2006, acknowledges that Osypka does not teach or suggest wrapping a second conductive wire about said cable portion as recited by claim 15.

Doan is directed to joining conductor cables and electrodes on a multi-lumen lead. In Doan, each conductor is threaded through a respective lumen in the lead body. *See* FIGURE 1 of Doan. The conductors exit the lumens through respective apertures at the end of the lead. *See* FIGURE 3. As explicitly taught by Doan, these conductors are attached to “metallic tube[s] 34” by “slidably appl[ying]” the tubes over the conductors. Col. 4, lines 22-24. After the conductors are attached in this manner, Each metallic tube 34 is then welded a ring electrode or other electrode. *See* col. 4, lines 36-37. In one embodiment, a “shock coil electrodes 52” are disposed over metallic tubes 34 and welded thereto. Col. 4, lines 45-52

Although Doan discloses the use of “shock coil electrodes,” Doan does not teach or suggest the method of manufacturing as recited by claim 15. Specifically, the “wrapping” limitation of claim 15 is recited as a step within a manufacturing process. The wrapping does

not merely refer to the physical state of the wire after the wire is placed on the stimulation lead. Instead, the “wrapping” limitation of claim 15 refers to how the second conductive wire is applied to the “cable portion.” Additionally, the same conductive wire that is “wrapped” about the cable portion is the same conductive wire that is connected to the second exposed first wire surface to make electrical contact with the wire previously exposed at the first wire surface. That is, the wrapped wire is “is welded to the first one of said first conductive wires at the second exposed first wire surface.”

Doan fails to disclose such a process. First, Doan relies on wire conductors which have their distal ends threaded through the lead body. There are no “exposed wire surfaces” in Doan as recited in claim 15. Furthermore, Doan does not recite wrapping a wire about the cable portion and welded that same wire to an “exposed wire surface” to form a circumscribing electrode.

Therefore, the applied references (either individually or in combination) do not teach or suggest each and every limitation of claim 15. A prima facie case of obviousness has not been established for claim 15.

Conclusion

Applicant respectfully submits that the application is in condition for allowance and requests the Examiner to pass the application to issue. Applicant has paid fees for an extension of time and an RCE fee in a separate paper. However, if any other fee is due, please charge Deposit Account No. 50-3906 from which the undersigned is authorized to draw.

Applicant has applied for a two-month extension of time in a separate paper concurrently filed herewith. However, if any further extension of time is necessary, Applicant hereby petitions for such extension of time and authorizes the Office to charge Deposit Account No. 50-3906 from which the undersigned is authorized to draw for the appropriate extension of time fee.

Dated: 01-08-2007

Respectfully submitted,

By /Christopher S.L. Crawford/
Christopher S.L. Crawford, Reg. No. 51,586
Advanced Neuromodulation Systems
6901 PRESTON ROAD
PLANO, TX 75024
(972) 309-8006